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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,227	02/11/2002	Takao Hasegawa	040894-5761	2958

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EXAMINER

DEUBLE, MARK A

ART UNIT

PAPER NUMBER

3651

DATE MAILED: 08/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

8K

**Office Action Summary**

Application No.

10/071,227

Applicant(s)

HASEGAWA ET AL.

Examiner

Mark A. Deuble

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,7-12,16-18,24,28,31-36,38 and 39 is/are rejected.
- 7) ☒ Claim(s) 3,5,6,13-15,19-23,25-27,29,30 and 37 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other:  |

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 4, 9 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "high coefficient of friction" in claims 4 and 28 is a relative term which renders the claim indefinite. The term " high coefficient of friction " is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

4. Claim 9 recites the limitation "said electromotive stapler" in line 5. There is insufficient antecedent basis for this limitation in the claim.

### *Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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6. Claims 1-2, 7-12, 24, 31-36, and 38-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese document number JP 10279169A as interpreted in light of equivalent U.S. Patent Nos. 5,895,036 and 6,120,020 both to Asao.

The Japanese document shows a document binding apparatus which externally attaches to the top of a printer apparatus 40. The binding apparatus includes a paper lead in roller mechanism with rollers 44 for leading a paper discharged from the printer apparatus, a paper arranging mechanism including side guides 22a and 22b and brush 14 for aligning a position of the paper, a binding table 30 that receives paper discharged from the printer apparatus, a paper binding mechanism including an electromotive stapler 60 for binding the paper in a vicinity of a corner portion of the paper, a paper discharge roller mechanism including rollers 18a and 18b for discharging the paper, and a stack tray 16 for receiving the paper discharged by the paper discharge roller mechanism. A control device controls the paper lead in roller mechanism, the paper arranging mechanism, the electromotive stapler and the paper discharge roller mechanism so that the paper discharged from the printer apparatus is sequentially led, arranged, bound through a staple, and then discharged. The control device utilizes a paper detecting sensor formed by a lever (given reference numeral 20 in the '036 Patent to Asao) to start the paper lead in roller mechanism in response to an on signal of the paper detecting sensor. The paper arranging mechanism is started in response to an off signal from a paper detecting sensor formed by a lever (given reference numeral 26 in the '036 Patent to Asao). The paper binding mechanism is started after a comparator outputs a command signal for driving the stapling device after a predetermined time passes (see Col. 3, Ln. 30-33 in the '036 Patent to Asao). After the paper is bound the discharge mechanism is started to send the bound sheets to the stack tray.

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The control device also employs a counter which measures the number of on operations of the detecting sensors 20 and 26 to start the binding mechanism when a predetermined number of sheets have been counted. The stapler 60 is mounted so that it can move in the direction of arrows 30 (see Fig. 2 or the Japanese document). This allows the stapler to be positioned so that a rear side edge portion of the paper enters between the clincher and the driver of the stapler before a corner portion of the paper accumulated on the binding table is bound by the stapler. Thus, the Japanese document shows a binding apparatus with all the structure required by claims 1-2, 7-12, 24, 31 and which operates with all the steps required by claims 32-36, and 38-39.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-2, 7-12, 16-18, 24, 31-36, and 38-39 rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese document number JP 10279169A as interpreted in light of equivalent U.S. Patent Nos. 5,895,036 and 6,120,020 both to Asao.

In regards to the added limitations of claims 16-18, that the paper lead in rollers and the paper discharge rollers gear shaped sections, it is noted that while the rollers are driven through pulleys and belts (see Col. 5, Ln. 40 in the '036 Patent to Asao), the use of pulleys and gears for driving rollers are well known to be interchangeable in the art. Therefore the use of gear shaped portions of the rollers is deemed to have been an obvious design choice absent some disclosure

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in the applicant's specification of some unusual advantage or result. *In re Kuhle*, 188 USPQ 7 (CCPA 1975).

***Allowable Subject Matter***

9. Claims 3, 5-6, 13-15, 19-23, 25-27, 29-30 and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claims 4 and 28 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kobayashi, Kubota et al, Moteki et al., and Hirota et al. all show document binding apparatuses which operated in a fashion similar to that of the present invention.

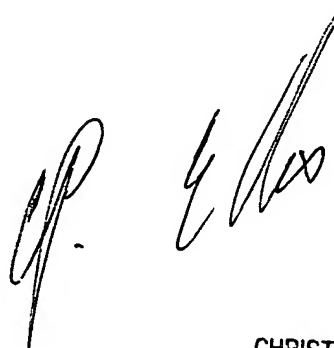
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Deuble whose telephone number is (703) 305-9734. The examiner can normally be reached on Monday through Friday except for alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher P Ellis can be reached on (703) 308-2560. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1113.

md

A handwritten signature in black ink, appearing to read 'C.P. Ellis', is written over a rectangular stamp.

CHRISTOPHER P. ELLIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600